

What is claim d is:

1. A polymer battery having at least one layer of a positive electrode, at least one layer of a polymer electrolyte retained by a separator and at least one layer of a negative electrode, each of which is in a thin film form, stacked in this order, wherein the entirety of the outer peripheries of the separator and of the negative electrode is positioned outside of the outer periphery of the positive electrode except for a collector tab (4) provided to the positive electrode so as to protrude from one side of the positive electrode, and the following relationship is satisfied in a portion of the outer peripheries of the separator and of the negative electrode: the length between the end of the negative electrode and the end of the positive electrode (D1) > the length between the end of the negative electrode and the end of the separator (D2).

2. The polymer battery according to claim 1, wherein the length between the end of the negative electrode and the end of the separator (D2) is set at a value which is 20% or less of the length between the end of the negative electrode and the end of positive electrode (D1).

3. The polymer battery according to claim 1, wherein the two sides of the positive electrode are provided with polymer electrolytes, respectively, retained by separators, and at least portions of the separators are linked to each other.

4. The polymer battery according to claim 1, wherein the positive electrode and the negative electrode are in rectangular forms, each of which is provided with a collector tab protruding from one side thereof, and the following relationship is satisfied in a side next to the side on which the collector tab (4) is formed: the length between the end of the negative electrode and the end of the positive electrode (D1) > the length between the end of negative electrode and the end of the separator (D2).

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5. A manufacturing method for a polymer battery having at least one layer of a positive electrode, at least one layer of a polymer electrolyte retained by a separator and at least one layer of a negative electrode, each of which is in a thin film form, stacked in this order, the method comprising the steps of:

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processing the positive electrode, the separator and the negative electrode such that the entirety of the outer peripheries of the separator and the negative electrode is positioned outside of the outer periphery of the positive electrode except for a collector tab (4), which is provided to the positive electrode so as to protrude from one side of the positive electrode, at the time when the positive electrode, the separator and the negative electrode are stacked; and

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using jigs having means for determining the positions of electrodes in at least two places and, thereby, stacking the positive electrode, the polymer electrolyte retained by the separator and the negative electrode so as to satisfy the following relationship in a

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portion of the outer peripheries of the separator and of the negative electrode: the length between the end of the negative electrode and the end of the positive electrode (D1) > the length between the end of the negative electrode and the end of the separator (D2).

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6. The method according to claim 5, wherein the separator, the positive electrode and the polymer electrolyte are integrated by means of polymerization/crosslinking before the positive electrode, the separator and the negative electrode are stacked.